

PATENT COOPERATION TREATY

PCT

REC'D 05 JUL 2004

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference H-33212A	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/EP 03/06483	International filing date (day/month/year) 18.06.2003	Priority date (day/month/year) 19.06.2002
International Patent Classification (IPC) or both national classification and IPC C07C311/13		
Applicant NOVARTIS AG et al		

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 5 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

 These annexes consist of a total of sheets.

- This report contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application

Date of submission of the demand 20.11.2003	Date of completion of this report 02.07.2004
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International application No. **PCT/EP 03/06483**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17))*:

Description, Pages

1-46 as originally filed

Claims, Numbers

1-31 as amended (together with any statement) under Art. 19 PCT

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

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**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	1-31
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-31
Industrial applicability (IA)	Yes: Claims	1-27, 31
	No: Claims	28-30

2. Citations and explanations

see separate sheet

Re Item III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

For the assessment of the present claims 28-30 on the question whether they are industrially applicable, no unified criteria exist in the PCT Contracting States. The patentability can also be dependent upon the formulation of the claims. The EPO, for example, does not recognize as industrially applicable the subject-matter of claims to the use of a compound in medical treatment, but may allow, however, claims to a known compound for first use in medical treatment and the use of such a compound for the manufacture of a medicament for a new medical treatment.

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

D1 : DE-A 28 54 932

D2 : JP-A 04 321671 (abstract)

novelty

The subject-matter according to claims 1 to 31 is novel pursuant to art. 33(2) PCT.

None of the documents of the available prior art according to the ISR discloses N-sulphonylaminoacetonitriles of general formula (I) as claimed.

inventive step

The subject-matter according to claims 1 to 31 seems not to be based on an inventive step pursuant to art. 33(3) PCT.

Substituted aminoacetonitriles as pesticides are known from D1, D2 (see also the present page 2, 3rd paragraph). In view of the closest state of the art D1, the problem posed is the provision of further pesticidal active compounds. This is solved by the present N-sulphonylaminoacetonitriles of general formula (I) according to claim 1. At present however no experimental data are available in order to show that the compounds as claimed indeed exhibit the above alleged activity. The "biological examples" on pages 45 and 46 solely state that the compounds of table 1 exhibit good activity. In the absence of these data however, an inventive step can not be assessed. In addition it is noted that these results only refer to compounds (I) with $-(\text{CR}_5\text{R}_6-\text{X})-\text{R}_1$ is

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a $-(\text{CH}_2\text{O})\text{-Ph}$ moiety (see page 26 of the description) whereas this moiety as claimed embraces a huge variety of substituents according to claim 1. Thus, it is doubtful whether the problem posed is solved over the whole area as claimed. Having in mind that small structural changes may significantly influence the activity of the compounds in question, a generalization of the tested derivatives of (I) to the compounds as claimed is not justified.

industrial applicability

Claims 28-30 relate to subject-matter considered by this Authority to be covered by the provisions of Rule 67.1(iv) PCT. Consequently, no opinion will be formulated with respect to the industrial applicability of the subject-matter of these claims (Article 34(4)(a)(i) PCT).

further remarks

- Contrary to the requirements of Rule 5.1(a)(ii) PCT, a document reflecting the prior art described on page 2, 3rd paragraph is not identified in the description and the relevant background art disclosed in the documents D1 and D2 is not mentioned nor are these documents identified therein.
- The description is not adapted to the claims as required by Rule 5.1(a)(iii) PCT.